

CLAIMS

1. A welded joint of a tempered martensitic heat resisting steel, characterized in that a fine-grained heat affected zone of weldment of a heat resisting steel having a tempered martensite structure exhibits a creep strength of 90% or more of a creep strength of a base metal thereof.

2. The welded joint of a tempered martensitic heat resisting steel according to Claim 1, wherein the heat resisting steel having a tempered martensite structure contains B in an amount of 0.003 to 0.03%, by weight.

3. The welded joint of a tempered martensitic heat resisting steel according to Claim 2, wherein the heat resisting steel having a tempered martensite structure contains one or more of C in an amount of 0.03 to 0.15%, Si in an amount of 0.01 to 0.9%, Mn in an amount of 0.01 to 1.5%, Cr in an amount of 8.0 to 13.0%, Al in an amount of 0.0005 to 0.02%, Mo+W/2 in an amount of 0.1 to 2.0%, V in an amount of 0.05 to 0.5%, N in an amount of 0.06% or less, Nb in an amount of 0.01 to 0.2% and (Ta+Ti+Hf+Zr) in an amount of 0.01 to 0.2%, by weight, and the residue is composed of Fe and inevitable impurities.

4. The welded joint of a tempered martensitic heat resisting steel according to Claim 3, wherein the heat resisting steel having a tempered martensite structure further contains one or more of Co in an amount of 0.1 to 5.0%, Ni in an amount of 0.5% or less and Cu in an amount of 1.7% or less, by weight.

5. The welded joint of a tempered martensitic heat resisting steel according to Claim 4, wherein the heat resisting steel having a tempered martensite structure furthermore contains one or more of P in an amount of 0.03% or less, S in an amount of 0.01% or less, O in an amount of 0.02% or less, Mg in an amount of 0.01% or less, Ca in an amount of 0.01% or less and Y and rare earth elements in a total amount of 0.01% or less, by weight.